



Design and Technology Policy



How is Design Technology a sacred subject?

Design Technology incorporates innovative creativity and risk-taking leading to a high level of resourcefulness enabling learners to become channels of divine inspiration. Design Technology calls forth imagination, resourcefulness, and creativity whilst drawing on a wide variety of complementary disciplines. Design Technology challenges students to engage with issues of inclusion, stewardship, the dignity of the human person and ecology.

Aims of the Design and Technology Curriculum

Design and Technology incorporates innovative creativity and risk-taking leading to a high level of resourcefulness enabling learners to become channels of divine inspiration. Design Technology calls forth imagination, resourcefulness, and creativity whilst drawing on a wide variety of complementary disciplines. Design Technology challenges students to engage with issues of inclusion, stewardship, the dignity of the human person and ecology.

Context

St Alban's is an average sized Catholic Primary and Nursery School, a member of St Clare CMAT, Diocese of Hallam and works closely with the Catholic Dearne Valley Family of Schools as well as the Sheffield Catholic Schools who are part of St Clare's. Our mission as a Catholic school is to create and develop a community centred upon the teaching of Jesus Christ where all individuals are enabled to reach their full potential in all elements of their lives. Our age range is 2 to 11 with 217 on roll, 187 FTE R – Y6. St Alban's Nursery opened in September 2021, and is led by teachers and experienced qualified Early Years practitioners and has continued to grow in numbers. St Alban's serves the local parishes of St Alban's Catholic Church of Denaby and Conisbrough and Blessed English Martyrs, Mexborough all of which are in the town of Doncaster. The school is in the highest 20% of socio-economically deprived catchments in the country and is one of the 5 most deprived schools in Doncaster with a changing profile of number of Catholics attending. In recent years, there have been children with more complex needs attending and from Y4 down to our youngest learners in Nursery, 80% of children in these classes fall within the 10% most disadvantaged in the country. At St Alban's 41% children are disadvantaged and a higher than average proportion of children with SEN at 32%, most of whom have speech, language and communication (63%) and/or social, emotional and mental health (27%) needs. Children entering EYFS are doing so with increasingly significant needs and our current Reception class have 44% of children with complex SEN. Most children at St Alban's are of White British heritage, with a lower than average proportion of children with EAL at 3.23%. St Alban's has lower than national levels of stability and since January 2021 there has been a 15% increase in the number on roll (R – Y6) therefore increasing mobility factors. Prior to COVID, attendance was 97.48% but reduced significantly with 27.8% persistently absent in 21/22 academic year. During the school year 22/23, attendance improved at a significantly higher rate than the national primary rate reaching 94.03%, an increase of 2.13% on 21/22 and a reduction to less than national levels for persistent absence at 19.6%.



Intent of the Design and Technology Curriculum

All pupils will experience a Design and Technology curriculum which:

- Develops the creative, technical and practical expertise necessary to perform everyday tasks confidently and to participate successfully in a technological world.
- Teaches them to follow the design process: Investigate and Evaluate, Focussed practical tasks, Design, Make and Evaluate, and to apply this process when designing and making high quality products.
- Prioritises teaching about the principles of nutrition and how to prepare healthy savoury foods.
- Allows them to make choices when applying new skills and knowledge to an outcome.
- encourages them to take a pride in their own achievements and to respect their own and others' work.
- Develops their cultural capital by drawing on inspiration from work of designers and engineers from a range of cultures and contexts, time and places.
- teaches them to use materials, tools and techniques for practical work safely.
- provides activities in which equality of opportunity is supported irrespective of gender, SEN, race, creed and disability, taking into account the individual needs of all children.

Transition from EYFS to Y1 and Y6 to KS3

Year 1 Design and Technology lessons are a natural progression from the Early Years curriculum, building on skills developed within the Early Learning Goals of Creating with Materials. It will also build on the Fine Motor Skills ELG, through further practise using small tools.

In order to prepare Year 6 for the transition into KS3, the children go to their secondary school for a full week in which they are exposed to Design and Technology lessons.

Implementation of the Design and Technology Curriculum

Projects on a Page, produced by the Design and Technology Association (DATA), is used to plan sequences of lessons leading to an end of unit product. Y1-6 will study three units each year.

Each unit of work (approximately 6 lessons) follows the sequence:

- Investigating and evaluating existing products
- Learning necessary knowledge and skills (remembering) and refining skills through focussed practical tasks (knowing)



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- Applying what they have remembered and know (reasoning) in designing, making and evaluating a product.

Where purposeful Design and Technology links can be made with other subjects, we will teach this subject through our adventures in learning expeditionary curriculum.

Planned differentiation, including for those with SEN, or for those who require additional challenge, will be by the outcome, by tasks set or by careful questioning. Alternative resources may be offered for children with particular sensory needs.

Coverage

Each year will include:

1. A unit of work on **Food and nutrition**.
2. 2 additional units of work on **Mechanisms**, **Structures**, **Textiles** or **Electrical systems**.

Whole-school overview

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Easby	Ongoing planned activities linked to children's interests and topics					
	Rosedale	Ongoing planned activities linked to children's interests and topics					
KS1	Roche	Sliders and levers Mechanisms		Knife and fork skills Bring on Breakfast (healthy breakfast) Food and Nutrition		Freestanding structures Structures	
	Selby	Fabric templates and joining techniques Textiles		Party time (sandwiches, savoury tarts) Food and Nutrition		Wheels and axles Mechanisms	
KS2	Whitby Y3	Levers and linkages Mechanisms		Shell structures Structures		Get Baking (bread dish) Food and Nutrition	
	Fountains Y4	Lovely lunch (sandwiches) Food and Nutrition		Switches and circuits Electrical systems		2d shape to 3d product Textiles	
	Kirkstall Y5	Serve a salad (salad) Food and Nutrition		Monitoring and control Electrical systems		Frame structures Structures	
	Rievaulx Y6	Grab and Go (spring rolls) Food and Nutrition		Combining different fabric shapes Textiles		Cams Mechanisms	

Recording and assessment

EYFS classes will use whole class floor-books and Y1 will use table group floor books to record learning. In these years, assessments will be formative, using EAZmags. In Y2-Y6, checklists will be completed following each unit of work, and these will be used to inform summative



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assessments. Checklists will be filed in Essential Learning folders along with DT knowledge organisers and booklets.

Impact of our Design and Technology Curriculum

- Children at the expected level of development will achieve the Essentials Curriculum Milestone as follows:
 - End of EYFS – ELG in 'Creating with Materials'
 - End of Y2 – Milestone 1
 - End of Y4 – Milestone 2
 - End of Y6 – Milestone 3
- Children have pride in their own work as a designer, and a respect for the work of others.
- Children have an awareness of the role of Design and Technology in society.
- High quality displays, which demonstrate progression of skills, enhance the school environment.

Desired outcomes for transition and vulnerable groups

We desire for children to be wholly prepared to move onto the next phase of their learning in Design and Technology. We desire for vulnerable groups such as SEN, FSM, EAL and persistent absentees to make accelerated progress so that they can enter secondary school with the necessary skills to further their education and improve their quality of life as an adult.

Review Date: November 2023



Appendices

Appendix 1: List of curriculum documents and online resources used

- Projects on a Page
- Primary Food Projects

[Primary food projects \(5-11 Years\) - Food A Fact Of Life](#)

- National Curriculum – Design and Technology

[National curriculum in England: design and technology programmes of study - GOV.UK \(www.gov.uk\)](#)